

# **2024 URSI Regional Conference on Radio Science (URSI-RCRS 2024)**

**Bhimtal, India  
22-25 October 2024**



**IEEE Catalog Number: CFP24J67-POD  
ISBN: 979-8-3503-9171-8**

**Copyright © 2024, International Radio Science Union (URSI)  
All Rights Reserved**

***\*\*\* This is a print representation of what appears in the IEEE Digital Library. Some format issues inherent in the e-media version may also appear in this print version.***

IEEE Catalog Number:	CFP24J67-POD
ISBN (Print-On-Demand):	979-8-3503-9171-8
ISBN (Online):	978-9-4639-6813-3

**Additional Copies of This Publication Are Available From:**

Curran Associates, Inc  
57 Morehouse Lane  
Red Hook, NY 12571 USA  
Phone: (845) 758-0400  
Fax: (845) 758-2633  
E-mail: [curran@proceedings.com](mailto:curran@proceedings.com)  
Web: [www.proceedings.com](http://www.proceedings.com)

CURRAN ASSOCIATES INC.  
**proceedings**  
.com

**Proceedings of URSI-RCRS 2024**  
**Table of Contents**

S. No	Title	First name Family name	Pages
1	A High-Performance Conformal Antipodal Vivaldi Antenna for Imaging Applications	Manish Kumar Rauniyar Kundan Kumar Suman Rahul Kumar Singh Ravi Kumar Gangwar	1 - 4
2	A Tree-Shaped Sierpinski Carpet Fractal Antenna for 5G Applications	Ashok Kumar S Anushka T Shanmuganantham D. Sindhanai Selvi	5-7
3	Design of inverted L shaped MIMO antenna for 5G applications	Ashish Joshi T Shanmuganantham D. Sindhanai Selvi Ashok Kumar S	8-11
4	High Isolated Compact 2x2 MIMO Antenna with DGS Decoupler for 5G/WLAN Application	Binit Mandal Pujayita Saha Anjan Kumar Kundu	12-15
5	Four-element Magneto-Electric Dipole filtering Antenna for X and Ku-band Application	Anubhav Kumar Raghvendra Kumar Chaudhary	16-19
6	ADPT: ARIES ST Radar Data Processing Tool	Samaresh Bhattacharjee Manish Naja Kishan Singh Rawat	20-23
7	Broadband Liquid Dielectric Measurement with Coaxial Transmission Line Technique	Prachi Tyagi Bhargavi V Asheesh Kumar Sharma Satya Kesh Dubey	24-27
8	Efficient RF-DC Rectifier for RF Energy Harvesting Devices	Akash S Nandhitha Pauly Gopikrishna Madanan	28-31
9	Magnetic Field based Satellite Attitude Estimation and Safe Mode Detection	Shashank Tomar Kanu Priya Govila Shubha Kapoor	32-35
10	Design and development of a low-noise redundant piezo driver cum scan generator	Sankar Majhi Sankalpa Banerjee Bhagyashree Joshi Subhadeep De	36-38
11	Phase Stabilized Diode Laser Frequencies for Raman Beam Generation	Anju Aishik Acharya	39-41
12	A Compact Low-Profile T- Shaped Strip Loaded Filtenna	Ashish Chandelkar Pratap Singh Katara Arvind Kumar	42-44
13	Design and Analysis of a Compact Ultra Wideband Antenna with Frequency Notch in WiMAX Band	Surajit Kundu	45-48
14	Design and Analysis of a Compact Wideband Antenna for Modern Wireless Communication System	Dheeraj Pandey Banoth Kavitha Surajit Kundu	49-52
15	A Novel Evolution of a Rectangular-Shaped Single-Band (47 GHz) Patch Antenna with Elongated Rectangular Slots for V-Band Uses	Sarah Raees Vaishali Kikan Ashwani Kumar	53-56
16	Dual Port Frequency Tunable MIMO Dielectric Resonator Antenna for 5G Sub 6 GHz Application	Jayant Kumar Rai Pinku Ranjan Rakesh Chowdhury	57-60
17	Slotted Stepped Patch Antenna for Ka Band Applications	R Budhi Sagar Aryadevi Remanidevi Devida Aiswarya S	61-64

**Proceedings of URSI-RCRS 2024**  
**Table of Contents**

18	Frequency Reconfigurable MIMO Antenna System for LTE, Bluetooth and WLAN Application	Ashish Watane Abhishek Patel Trivesh Kumar Matadeen Bansal Manoj Singh Parihar	65-67
19	Design of 2-element Conformal GPS Antenna with Wide Beamwidth for a Cylindrical projectile	Samruddhi Rohokale Rohan Das Pranoti Bansode C Bhattacharya	68-71
20	Triple-Band Co-Polarized QMSIW In-Band Full Duplex (IBFD) Antenna	Gunjan Srivastava Amit Ranjan Azad Akhilesh Mohan	72-75
21	Frequency Selective Resorber Shielded Low Radar Cross Section Antenna	Mehran Manzoor Zargar Archana Rajput Kushmanda Saurav	76-78
22	Wide-Angle Beam Scanning Leaky-Wave Antenna Based on CRLH TL for Enhanced Radiation Performance in sub-6 GHz 5G	Sajeev K F Nayana M D Remya R Gopikrishna M	79-82
23	Bi-Directional Back-to-back Dielectric Resonator Two-Port Antenna System with Dual Radiation	Debashis Das SK Rafidul Rajib Jana	83-86
24	Resonant Frequency of a Cylindrical Dielectric Coated Conductor-based Dielectric Resonator Antenna	Sudipta Maity	87-90
25	Design and Analysis of Slotted Triangular Uniplanar Antenna	Bhuvana Nair S Ignacio Gil Sreedevi K Menon	91-94
26	Compact Slit-Type DGS Integrated X-Band 2x2 Microstrip Antenna Array with Improved Radiation Characteristics	Rohan Das Pranoti Bansode Subhendu Chakraborty Ayan Bandyopadhyay Chirag Mistry Amitavo Roy Choudhury Subhradeep Chakraborty	95-98
27	Design and Analysis of 4 Group X-Band Corporate feed and 5 element Series Feed C-Band Shared Aperture Antenna Array for Spaceborne Synthetic Aperture Radar Applications	Bala Ankaiah Nunna Suman Nelaturi	99-102
28	Design and Analysis of 4x4 X-Band Conformal Antenna Array with Corporate Series Feeding for Spaceborne SAR Applications	Bala Ankaiah Nunna Suman Nelaturi	103-105
29	A Circularly Polarized Cylindrical Dielectric Resonator Filtenna for Vehicular Applications	Anil Rajput Sanghmitra Ravi Kumar Gangwar	106-109
30	Cross-polar Radiation Suppression of an Circularly Polarized Antenna Utilizing Minimally Defected Ground Structure	Subhendu Chakraborty Subhradeep Chakraborty Sudipta Chattopadhyay Debasish Pal Ayan Kumar Bandyopadhyay	110-112
31	Tomographic Ground Penetrating Radar: Comparison of Various Image Configurations	Mallikarjun Erramshetty	113-115
32	Detection of Alzheimer's Disease in Human Brain using Microwave Sensor	Namrata Mendiratta Komal Kumari Gopi Shrikanth Reddy Anirban Sarkar	116-119

**Proceedings of URSI-RCRS 2024**  
**Table of Contents**

33	Dual Band Ultra-Wideband Water Filled Microwave Absorber	Garima Tiwari Pramod Kumar Gupta Trivesh Kumar Biswajeet Mukherjee	120-123
34	Ultra-thin Quad Spiral Metamaterial Absorber for Multi-band Microwave Applications	Anjali M D Athira Das M Divya Sivanandan Sajeev K F Gopikrishna M	124-127
35	Frequency-Tunable Corrugated Metasurface for Linear-to-Circular and Circular-to-Linear Polarization Conversion	Nandhitha Pauly Gopikrishna M	128-131
36	Maxwell-Garnett Mixing Model Assisted Methodology for Multilayer RAM Design	Pooja Warhekar Amitabha Bhattacharya Swati Neogi	132-135
37	Deep-Learning Assisted Tomographic Reconstruction of Buried Objects	Mallikarjun Erramshetty Harisha SB	136-139
38	High Gain Multiband Millimeter Wave Slotted Patch Antenna for 5G Applications	Aiswarya S Meenu L K A Unnikrishna Menon Sreedevi K Menon	140-143
39	Substrate Integrated Waveguide Bandpass Filter With Asymmetric Response Using Frequency-Dependent Coupling	Amit Ranjan Azad Gunjan Srivastava Akhilesh Mohan	144-147
40	Reconfiguring the Transmission Capability of Broadband FSS for 5G and satellite communication	Prachi Tyagi Aijaz Ahmed Satyakesh Dubey	148-151
41	A Double Slotted Antipodal Vivaldi Antenna for 5G mmWave MIMO Applications	Sanjana Paul Raghendra Kumar Chaudhary Kumar Vaibhav Srivastava	152-155
42	Design and Simulation of a High-Gain Terahertz Antenna for 6G IoT Application	Gaurav Kumar Soni Akash Rawat Dinesh Yadav Purnima Sharma Manish Varun Yadav	156-159
43	Leaky-wave Beam Scanning Antenna based Retrodirective Coded Metasurface	Komal Kumari Ravi Anand Rakesh Prasad Anirban Sarkar	160-163
44	A 45-Degree Rotated Square Ring Frequency Selective Surface Structure for Broadband Matching Automotive Bumper	Nancy Modi Busineni Mahesh Kumar Jayanta Mukherjee	164-167
45	Improving the Performance of Free Space Quantum Communication with Adaptive Optics and Modulation Schemes	Debarpita Paul Choudhury Dalia Nandi	168-171
46	Modulation Techniques for Visible Light Communication using White LEDs in 5G Network	Alak Halder Abhirup Das Barman	172-175
47	A Novel Encrypted High Frequency FSK Modulation Technique Powered by Microwave Gunn Oscillator	Prashnatita Pal Amiya Kumar Mallick Rituparna Bhattacharya Jayanta Poray	176-179
48	Design and Characterization of TE-mode Cavity for Digital Communication using Rubidium atoms	Yashika Aneja Aijaz Ahmed Satya Kesh Dubey	180-183

**Proceedings of URSI-RCRS 2024**  
**Table of Contents**

49	NavIC L1C: Signal Receiving and Processing using Software-Defined Receiver	Abhishek Kumar Abhijit Dey Nitin Sharma Apurv Vasal Sugandh Mishra Rohan Urdhwaresha	184-187
50	Study of Spoofing Attacks on QZSS, GPS, and Galileo Signal Authentication	Dinesh Manandhar	188-190
51	Machine Learning Based Indoor Path Loss Model	Debstuti Biswas Sayan Mondal Sujoy Mondal Abhirup Das Barman	191-194
52	Development of an FPGA based Smart Antenna System for Target Localization	Chethana P N Ishita Ghosh Abhirup Bhawal Saurav Ganguly	195-198
53	Development of Compressive Sensing based SAR Image Reconstruction using $l_1$ -norm Coordinate Decent Optimization	Saurav Ganguly Mainak Mukhopadhyay	199-202
54	Design Considerations for the Optimization of Propagation Loss of Ge <sub>1-x</sub> Si <sub>x</sub> -on-Al <sub>2</sub> O <sub>3</sub> Optical Waveguides for the 2- $\mu$ m Communication Band	Harshvardhan Kumar	203-206
55	Design and Thermal simulation of the H-plane waveguide coupling for high power Ku Band Helix TWT	Chirag Mistry Raktim Guha Subhradeep Chakraborty Amitavo Roy Choudhury Mukesh Kumar Alaria Sanjay Kumar Ghosh	207-210
56	Ultra-thin Graphene Metasurface as Tunable Absorber and Terahertz Refractive Index Sensor	Naveen Kumar Maurya Anil Kumar Nayak	211-214
57	AI-Driven Metasurface-Based Printed Monopole Antenna for IoT-Enabled Wireless Applications	Bikash Behera Debashish Pal Mohammed H Alsharif	215-218
58	Investigation of a SADEA-Driven Metasurface-Based Printed Monopole Antenna for Fifth Generation and Beyond Applications	Bikash Behera Debashish Pal Mohammed H Alsharif	219-222
59	A Flexible Broadband Microwave Absorber with Resistive Ink	Satya Prasad Mishra Sudipta Maity	223-226
60	Design and Analysis of High Angular Stability Wideband Bandstop FSS for 6G D Band Applications	Harsh Choudhary Venkata Siva Prasad D Shrivishal Tripathi	227-230
61	Black Phosphorus Based Surface Plasmon Resonance Sensor for Detection of Formalin	Mohan kumar Paswan Rikmantra Basu	231-236
62	A Tunable Frequency Selective Surface for Band Pass and Band Stop Applications	Madhusudhan Goud Rangula Princy Paul Basudev Majumder Krishnamoorthy Kandasamy	237-238
63	A Dual Band Polarization Insensitive Metasurface Absorber for Terahertz Applications	Ajeet Singh Verma Somak Bhattacharyya	239-242
64	Novel Electronic and Optical Processes in Ge <sub>1-x</sub> Sn <sub>x</sub> Alloy Based Electronic and Photonic Devices	P K Basu Bratati Mukhopadhyay Rikmantra Basu	243-244

**Proceedings of URSI-RCRS 2024**  
**Table of Contents**

65	Challenges in Acquiring and Tracking NavIC S-Band Signals due to Wi-Fi Interference	Sudhanshu Pandey Rajesh Kumar Suresh D Roopa M V Subramanya T Ganesh	245-246
66	Investigation of Whistler Waves in the Venusian Atmosphere	Kriti Shrivastava Jayesh Pabari	N/A
67	Radio Occultation Experiment for Deriving Planetary Atmospheric Profiles	Sonam Jitarwal Varun Sheel Jayesh Pabari	251-253
68	Impact of plastic housing impurity on ESD failure	Joydeep Pal Razic M. M Mohammed Bibhu Prasad Nayak	254-256
69	Impact of component proximity coupling on EMC filter design	Bibhu Prasad Nayak Sayantan Dhar Joydeep Pal Kaushik Patra	257-259
70	Analysis of RF Link Budget Design, Development and ITU Filing for LEO Satellite	Yasho Vijay Singh Yadav Arbhita Mani Tripathi Susanta Kumar Parui Dilip Dave TVS Ram	260-263
71	Compact dual-mode microstrip bandpass filter with spurious harmonics suppression	Tarun Kumar Das Niloy Mondal Asmita Bhattacharya Sayan Chatterjee	264-267
72	Simulation of Scattering Coefficients and Phase for Cloud Particles and Hail at X-band for Estimating Polarimetric Variables	Athira S Swaroop Sahoo Subrata Kumar Das	268-271
73	Effect of the diurnal contrast of atmospheric thermodynamics on rain and cloud microstructures at a tropical location	Rohit Chakraborty Gargi Rakshit Animesh Maitra	272-275
74	Long-term trend Analysis of aerosol optical characteristics in the Central Indo-Gangetic Plain	Prayagraj Singh Bakhtawar Abdullah Aditya Vaishya Prabhunath Prasad Shantanu Rastogi	276-279
75	Aerosol and Cloud Detection Algorithm for Space-Based Lidar Observations	Radhika Chipade Mehul Pandya	280-283
76	Satellite based observations of Cloud Base Heights and Validation with Ground Based Ceilometer	Krishnanka Jyoti Baishya Binita Pathak Barsha Dutta Som Kumar Sharma Partha Jyoti Das Kalyan Bhuyan Pradip Kumar Bhuyan	284-286
77	Seasonal Variations in Black Carbon, Boundary Layer Height, and Aerosol Absorption Index Over Gorakhpur Region: A Decadal Study (2013-2023)	Bakhtawar H Abdullah Prayagraj Singh Aditya Vaishya Prabhunath Prasad Shantanu Rastogi	N/A
78	Evolution of Warm Cloud Effective Radius using Multi-Satellite Observations	Sijo Joseph Subin Jose Lakshmi N Bharathan	291-294

**Proceedings of URSI-RCRS 2024**  
**Table of Contents**

79	Study of cloud base and atmospheric boundary layer height over Gorakhpur in the IGP	Minakshi Singh Prayagraj Singh Aniket Patel Prabhunath Prasad Som Kumar Sharma Shantanu Rastogi	295-298
80	Lightning induced changes in rain microphysics	Kavita Das Parvathy Meena Shreyasi Thankachy P Lekhranj Upadhyay Saurabh Saini	299-302
81	On variability of PM2.5 and Heat Index for two locations in India during El Niño	Manu Mehta Mehak Sharma Anusha Arora Aditi Mehta Nishtha Mishra Shivani S Ranu Gadi	N/A
82	Sensitivity of Microphysics parameterizations for a super cyclonic storm	Pushpa Rapeti Somnath Mahato Pallavi Prabhu Gauri Shankar Sawaisarje Geeta Agnihotri	N/A
83	Long term changes in air pollutants at urban regions of India using remote sensing data	Vikrant Tomar Manish Naja Shyam Lal Prajwal Rawat Uendra Kumar	309-312
84	Unraveling Ozone Formation Regimes in the Himalayan and IGP Regions: A Satellite-Based Study	Mahendar Chand Rajwar Manish Naja Prajwal Rawat Vikrant Tomar Priyanka Srivastava Shyam Lal	313-316
85	Target Characteristics on Rotation in Euclidean Space Using Full Polarimetric SAR Data	Subhadip Dey Irena Hajsek	317-320
86	Land-cover Type Classification Over Sundarbans Using the Optical Bands and the Kennaugh Parameters from Sentinel Sensors	Sukanya Mukherjee Subhadip Dey	321-324
87	Spatio-temporal variability of NDVI over Indian continents	Ramakant Tiwari Dileep Kumar Gupta Prashant Kumar Chauhan Satyam Prajapati Abhay Kumar Singh	325-328
88	Retrieval of Venus' Ionospheric Profile from Radio Science Experiment Onboard Akatsuki	Tirtha Jyoti Kalita Varun Sheel S M Sharma	329-332
89	205 MHz Stratosphere-Troposphere Radar at Cochin, India: Scientific Applications and Accomplishments	Ajil Kottayil Ahana K K S P Sujithlal Baazil Thampy Prajwal K Devika M V Silpamol D S Tesna Maria Satheesan K Abhilash S	333-336

**Proceedings of URSI-RCRS 2024**  
**Table of Contents**

90	Atmospheric Pillar: Active remote sensing perspective	Kalapureddy M C R Pavankumar Olekar Meenu R Nair Ambuj Kumar Jha Sukanya Patra Shridhar Kumar Pandithurai Govindan	337-338
91	Impact of Climate Change and Socioeconomy on Lightning Fatalities across India	Rohit Chakraborty Sravaetri Chaudhuri	N/A
92	Design requirements of space-based radio instrument at L4-L5 for space-weather monitoring	Anshu Kumari Elizabeth A Jensen Shing F Fung Lihua Li Manohar D. Deshpande Natchimuthuk Gopalswamy	343-346
93	Assessment of position errors under various signal perturbation factors and comparison of inter-constellational findings	Trisani Biswas Ashik Paul	347-350
94	Latitudinal response of the Ionosphere to geomagnetic disturbances in 2021	Shishupal Singh V Chauhan Vishakha R Singh V Singh O P Singh	351-354
95	Impact of the December 31, 2023, X5 Solar Flare on total electron content (TEC) at low latitude IGS stations.	Vishakha V Chauhan Shishupal Singh R Singh V Singh O P Singh	N/A
96	Co-seismic Ionospheric disturbances induced by the Mw 7.4 Earthquake of April 2, 2024 in Hualien City, Taiwan	Sneha Bisht V Chauhan R Singh A R Singh V Singh O P Singh	359-362
97	Ionospheric plasma variability using GPS Total Electron Content (TEC) over Equatorial-, Low- and Mid-latitude stations during the low and high solar activity period	Mini Rajput Sanjay Kumar Mukulika Mondal Abhay Kumar Singh	N/A
98	Response of the ionosphere to M-Class solar flares: Observation from GPS and COSMIC	Arti Mishra Mini Rajput Sanjay Kumar Abhay Kumar Singh	N/A
99	The Study of ionospheric TEC variation during a geomagnetic storm over low and high-latitude regions	Mukulika Mondal Jitesh Barman Abhay Kumar Singh	370-373
100	Investigation on the effect of the solar/geomagnetic storm on NavC ionosphere data	Megha Maheshwari Nirmala Srin Gurpreet Singh Sathyaranayana G	N/A
101	Evaluating Ionospheric Responses to Geomagnetic Storms through IRNSS-Derived S4 Index and Total Electron Content	Nagesh Kothawale Shridhar Kamble Karishma Maner Supriya Kamble Prashant Chikode Rajiv Vhatkar Ravindra Mane	378-382

**Proceedings of URSI-RCRS 2024**  
**Table of Contents**

102	A Novel Approach to Global Ionosphere Delay Estimation with Constrained Optimization	Gurpreet Singh Megha Maheshwari Nirmala Srin	383-386
103	Intense Geomagnetic Storm effect on the Ionosphere using Ionosonde observation over the 24th Solar Cycle	Bhupendra Malvi Rafi Ahmad Pramod Purohit	N/A
104	Modelling of sub-ionospheric VLF signal propagation during a solar flare: an autonomous approach	Sayak Chakraborty Tamal Basak	N/A
105	Ionospheric Responses to Very Severe Tropical Cyclones	Barsha Dutta Rumajyoti Hazarika Binita Pathak Pradip Kumar Bhuyan Uday Bhattacharjee Sangstitha Baruah	395-399
106	First Results of the Magnetometer (MAG) Payload onboard Aditya-L1 Spacecraft	Vipin Kumar Yadav Vijaya Y Srikar P T Krishnam Prasad B Monika Mahajan K V L N Mallikarjun Narendra S Abhijit A Adoni Vijay S Rai Veeresha D R Syeeda N Zamani	400-403
107	Disturbance in the low latitude D region of ionosphere due to the super geomagnetic storm of April 2023	Rajat Tripathi Dayanand Ajeet Kumar Maurya	N/A
108	Lower ionospheric response during cyclone Taukate inferred using very low frequency signals	Suniti Saharan Ajeet K Maurya	407-410
109	Generation of Streaming Beam-Plasma Instability in Variable Lunar Plasma around Moon	Vipin Kumar Yadav Mahima Agarwal Mehul Chakraborty Rajneesh Kumar	N/A
110	Nonthermal pulsational mode stability	Jonmoni Dutta Pralay Kumar Karmakar	N/A
111	Instability behaviors of bipolar dusty plasma fluids in Saturnian mid-magnetosphere	Tanushree Bezbaruah Pralay Kumar Karmakar	N/A

**Proceedings of URSI-RCRS 2024**  
**Table of Contents**

112	Polarized EIBI-gravitating dust molecular cloud stability with bispectral electron distribution	Dipankar Ray Pralay Kumar Karmakar	N/A
113	11.2 GHz Motorized Small Radio Telescope constructed from Satellite TV Dish	Kaustav Bhattacharjee Krish Shah Himanshu Grover Jinti Barman Adya Shukla Paramasivan Arumugam	427-430
114	Construction and Observational Results of The Bavdhan 21cm Small Radio Telescope	Parth Darade	431-433
115	The ORT and the uGMRT Pulsar Monitoring Program : Timing Irregularities in Pulsars	Himanshu Grover Bhal Chandra Joshi Paramasivan Arumugam	434-437
116	An FRB Population Synthesis for SPOTLIGHT and Its Cosmological Inference	Siddhartha Bhattacharyya Saptarshi Sarkar Spotlight  Jayanta koy Jayaram Chengalur Karel Adamek Kenil Ajudiya Wes Armour Bhavnes Bhat Siddhartha Bhattacharyya Deepak Bhong Jyotirmoy Das Ritavash Debnath Nishant P Deo Amit Deokar Bidisha Dey Chahat Dudeja Shelton Gnanaraj Gurjeet Jagwani Afifa Jamal Tejas Kamble Santaji N Katore Sanjay Kudale Ajith Kumar Mekhala Muley Anjan Kumar Nandi Arpan Pal Ujjwal Panda B S Patil Nilesh Raskar Pravin A Raybole S Harshavardhan Reddy	N/A
117	SPOTLIGHT: A Probe of the Fast Radio Transient Sky	Santaji N Katore ShilKumar Meshram Ujjwal Panda Spotlight  Deepak Bhong Sanjay Kudale Santaji N Katore Nilesh Raskar Spotlight  Mekhala Muley Sanjay Kudale Nishant Deo Spotlight  Chahat Dudeja Siddhartha Bhattacharyya Spotlight	441-443
118	A web-based tool listing discovery database with transient alert generation for the SPOTLIGHT	Santaji N Katore ShilKumar Meshram Ujjwal Panda Spotlight	N/A
119	Online control of the SPOTLIGHT and integration with the GMRT system	Deepak Bhong Sanjay Kudale Santaji N Katore Nilesh Raskar Spotlight	447-448
120	Optimal tiling of SPOTLIGHT field-of-view with multi-beam synthesis	Mekhala Muley Sanjay Kudale Nishant Deo Spotlight	449-451
121	Spectro-Temporal-Polarimetric Study of FRBs with SPOTLIGHT	Chahat Dudeja Siddhartha Bhattacharyya Spotlight	452-455

**Proceedings of URSI-RCRS 2024**  
**Table of Contents**

122	A real-time imaging localisation pipeline for the SPOTLIGHT	Arpan Pal Sanjay Kudale Spotlight	456-459
123	A multi-beam FRB detection pipeline with real-time injection for the SPOTLIGHT	Ujjwal Panda Kenil Ajudiya Spotlight	460-463
124	Discoveries from GCGPS survey and its application for pulsar search with SPOTLIGHT	Jyotirmoy Das Spotlight	N/A
125	Stereoscopy in Distant Galaxies: Exploring Techniques and Simulations	Ira Rai Jenny Wagner Richard Gordon	468-471
126	A radio galaxy with precision embedded within a diffuse emission resembling an odd radio circle	Shobha Kumari Sabyasachi Pal	N/A
127	Observing Pulsars and Transients at Low Radio frequencies using 1-bit digitization	Kshitij Bane Indrajit Barve G V S Gireesh C Karthiravan R Ramesh	476-479
128	Identifying pulsar candidates in interferometric radio images using scintillation	Jitendra Salal Shriharsh P Tendulkar Vishweshwar Ram Marthi	N/A
129	A real-time post-correlation beamformer and correlator for the SPOTLIGHT	Harshavardhan Reddy Suda Sanjay Kudale Spotlight	484-486
130	Overview of the Indian Pulsar Timing Array	Shaswata Chowdhury J Singha P Rana A K Paladi N D Batra P Tarafdar	487-488
131	Solar Filaments Detection using Active Contours Without Edges	Sanmoy Bandyopadhyay Vaibhav Pant	N/A
132	Study of Radial Differential Coronal Rotation using Solar Radio flux for period (1980-1986)	Ved Prakash Gupta Vivek Kumar Singh Satish Chandra	N/A
133	Variability in Solar Proton Events (SPEs) associated with GLEs during the last 28 years (1996-2024)	Priyank Srivastava Ashok Kumar Singh	N/A
134	Understanding the Venusian and Terrestrial lightning due to streamer propagation	Tejaswi Kondhiya Jayesh Pabari	N/A
135	Extreme Conditions for Electrification during Dust Devils on Mars	Jayesh Pabari Roshni M Aanchal Sahu	N/A
136	Space-Weather implications of a Radio-loud CME from Sigmoidal Active Region NOAA 12473	Hema Kharayat Binal D Patel Bhuvan Joshi	N/A
137	Solar Activity during the rising phase of solar cycle 25: A case study	Ashok Kumar Singh Priyank Srivastava	N/A
138	Influence of Gravitational and Non-Gravitational Forces on Interplanetary Dust	Aanchal Sahu Jayesh Pabari	N/A

**Proceedings of URSI-RCRS 2024**  
**Table of Contents**

139	Investigation on the Effect of Duration of Electromagnetic Radiation Exposure on Material Characteristics of Tissue	Meenu L Aiswarya S K A Unnikrishna Menon Sreedevi K Menon	515-517
140	Vital Sign Detection and Parameter Estimation using FMCW Radar	Abhijith S S Swaroop Sahoo Barghavi Parthiban Karthik Ravindran S Gokhun Tanyer Peter F Driessen	518-521
141	Design of Compact Multiband Circular Patch Antenna with E slot for Medical Microwave Radiometry	Neenu Vymeliyath Sajeew Kavitha Arunachalam	522-525
142	Design of multi-element hyperthermia applicator using dielectric loaded folded dipole antenna	Baburam Mudavath Kavitha Arunachalam	526-529
143	Reducing the Dependency on Discrete Elements: An Alternative Theoretical Approach to Realizing a Filtering Microwave Phase Shifter	Shubham Tirmanwar N. Abhishikth Raj Debapratim Ghosh	530-533